

Written Exam at the Department of Economics Summer 2017

**Economics of Banking**

Final Exam

11.8.2017

(3-hour open/closed book exam)

Please note that the language used in your exam paper must correspond to the language for which you registered during exam registration.

**This exam question consists of 2 pages in total**

*NB: If you fall ill during the actual examination at Peter Bangsvej, you must contact an invigilator in order to be registered as having fallen ill. Then you submit a blank exam paper and leave the examination. When you arrive home, you must contact your GP and submit a medical report to the Faculty of Social Sciences no later than seven (7) days from the date of the exam.*

### **Problem 1**

A new bank tries to introduce a new line of business, based on credits financing the production of movies. These productions are secured by public guarantees, so that the return is reasonably safe, but the production period of a movie can be quite long.

The bank wants to attract funds for this purpose and hence contacts investors who would themselves have been interested in financing production of movies but whose economic conditions do not permit them to engage in so long-sighted an investment. Which type of contract should be offered to such investors by the bank?

Now a new investment opportunity has emerged, namely the production of TV entertainment programs. Here the production time is short; the demand for the products and consequently the earnings are not well documented at the moment, but it is expected that this uncertainty will be considerably reduced in the near future. Which consequences will the emergence of this new investment opportunity have for the business of the bank and the formulation of its contracts?

### **Problem 2**

An industry has a number of firms each using a specific technique for producing final output. The techniques differ among each other in the degree of uncertainty to which final output is subjected. The firms obtain credits against collateral in the form of fixed property, but the bank cannot observe and evaluate the techniques used and their associated risk.

Explain that if the firms in this situation want to maximize profits after servicing of debt, then there will be a positive relationship between riskiness and average profits. What will the implications of this relationship be for the firms' demands for credits?

Explain in outline the consequences for the market for credits to this type of firms, when it is assumed that banks generally want to expand their loans if the average earnings increase.

### **Problem 3**

In a given field of business there are two different types of investment projects, characterized by low or high risk respectively, whereby the low risk project is more profitable for society as a whole. Explain why a sufficiently high level of interest rates will lead to credit rationing and a lower level of profit of investments.

It is now proposed that the traditional type of loan contract, where a fixed sum is repaid unless the investment fails, is replaced by contracts with a fixed low interest rate combined with an *upside*, a percentage of the profits of the investment project. Give a discussion of the way in which such an arrangement will influence the credit market and society as a whole.

Due to a shift in global business conditions it is now expected that future deviations of the interest rate from its present level will be much greater. How does this influence the above considerations?